Perspectives on generalized pustular psoriasis treatment in North America: Survey results from dermatologists in the Corrona Psoriasis Registry

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Introduction

- Generalized pustular psoriasis (GPP) is a rare and potentially-life threatening systemic autoinflammatory disease, characterised by recurrent acute flares that comprise widespread diffuse dermatitis with accompanying sterile, neutrophil-filled pustules¹⁻³
- Without treatment, acute GPP flares may persist, leading to serious complications, including sepsis, renal failure, congestive heart failure, and in some cases, death³
- Furthermore, despite treatment, most patients with GPP suffer residual disease post-flare, ranging from erythema and erythroderma to desquamation^{3,4}
- Standard of care for GPP varies by region, and there are no therapies approved for the treatment of GPP in the USA or Europe⁵
- The lack of approved treatments that are specific to GPP means that patients are treated similarly to those with plaque psoriasis⁶
- Given that there are limited publications characterising how patients with GPP are treated, a survey of dermatologists from the USA and Canada participating in the Corrona Psoriasis Registry was conducted
- The aims of this survey were to explore which treatment options are currently used, the challenges faced and the perceived adequacy of currently available treatment options for GPP

Methods

- Dermatologists in the Corrona Psoriasis Registry (a collaboration with the National Psoriasis Foundation) who had treated adult patients (aged ≥ 18 years) with GPP within the past 5 years were eligible to participate in the survey
- Dermatologists must have been at an active clinical centre as of 10 September 2019 (N=448) to be included
- Dermatologists in the Corrona Psoriasis Registry who had treated a patient with GPP (N=32) were invited to participate in an online survey hosted on SurveyMonkey
- The survey included 28 multiple choice questions exploring GPP flare onset and diagnosis, flare frequency and duration, treatment of flares, treatment of residual disease and physicians' overall experience of managing patients with GPP
- Respondents were asked to exclude patients with juvenile pustular psoriasis, localised forms of pustular psoriasis (e.g. palmoplantar pustulosis and acrodermatitis continua of Hallopeau), acute generalized exanthematous pustulosis and pustulation restricted to psoriatic plaques
- A descriptive analysis of the responses was conducted

Results

- Of the 32 invited dermatologists, 30 met the eligibility criteria. Of these 30 eligible dermatologists, 29 responded (97% eligible response rate)
- Most respondents reported treating multiple patients with GPP within the past 5 years, with 72% reporting that they had treated \geq 3 patients
- The most commonly endorsed signs and/or symptoms for initiating, switching or adding a treatment (non-biologic or biologic) during a GPP flare were worsening skin lesions (97%) and pustules (90%) (Figure 1)

Figure 1. GPP signs and symptoms considered by respondents before initiating, switching or adding a non-biologic treatment during a GPP flare (N=29)



• Most respondents were "somewhat likely" or "very likely" to prescribe non-biologic treatments during an GPP flare, including cyclosporine (85%) and either acitretin or isotretinoin (55%; Figure 2A); the most commonly used biologic treatments included infliximab (53%), ixekizumab (52%), adalimumab (41%) and secukinumab (41%; **Figure 2B**)

Figure 2. Response frequency for likelihood of respondents to prescribe non-biologic (A) or biologic (B) treatments during a GPP flare (N=29)



- Most respondents indicated that existing treatment options are adequate most (79%) or all (14%) of the time for the treatment of GPP flares (Figure 3)
- Despite this, 83% of respondents indicated that patients still had residual symptoms post-flare, and 72% considered treatment options to be too slow to control flares



Methotrexate (n=29 Apremilast (n=28) Cyclosporine (n=28) Other non-biologic (n=14) Oral steroids (n=29) Secukinumab (n=29` Ixekizumab (n=29) Adalimumab (n=29) Guselkumab (n=29) Other biologic (n= Brodalumab (n=28) Certolizumab pegol (n=28

Infliximab (n=28) Etanercept (n=28) Golimumab (n=27)

Figure 3. Response frequency for perceived adequacy of existing treatment options for a GPP flare by survey respondents (N=29)

• Outside of a flare, most respondents indicated that they were "somewhat likely" or "very likely" to prescribe topical steroids (83%; Figure 4A), secukinumab (62%), ixekizumab (62%) and adalimumab (56%; Figure 4B) to treat residual disease

• Most respondents (83%) reported that treatments for residual disease were adequate most of the time

- However, 43% of respondents who had treated \geq 3 patients over the past 5 years indicated that existing treatment options "rarely" or "very rarely" prevented new flares (Figure 5); most dermatologists (56%) whose patients had ≥ 2 flares a year reported inadequacy in treatment of residual disease at least "sometimes"

Figure 4. Response frequency for likelihood of respondents to prescribe non-biologic (A) or biologic (B) treatments for residual disease (N=29)



32%

54%

19% 63% Very unlikely Somewhat unlikely Neither likely nor unlikely Somewhat likely Very likely

25%

21%

14%

21% 7% 11% 7%



Conclusions

- was slow
- future flares

References

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Disclosures

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29%

14% 11%

7% 14%

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Figure 5. Response frequency for perceived adequacy of treatment

 This survey of dermatologists in the Corrona Psoriasis Registry indicates that the clinical manifestation of skin symptoms commonly drives treatment options in GPP

• While most respondents indicated that GPP flare treatments were adequate, they also reported that the time to response

These results highlight the unmet need for effective and novel treatments with a faster onset of action, that can provide complete disease resolution and have the ability to prevent

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